

A New Anthurid Isopod from the Estuary of the Muromi river, Northern Kyushu, Japan*

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北九州室見川河口より採集されたウミナナフシ（等脚目甲殻類）の一新種

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1. 福岡県室見川河口で採集されたウミナナフシを、新種 *Cyathura muromiensis* (和名、ムロミスナウミナナフシ) として記載した。これは日本近海における本属の最初の記録である。
2. 本種は *Cyathura* 属の他種から、主として大顎および雄第二腹肢内肢の交尾補助器の形態によって区別される。
3. 21個体のうち、雄はわずか1個体であった。雌が多く見い出されることは *Cyathura* 属の他の種でも知られている。

Hitherto, none has been reported on the crustacean genus *Cyathura* (Isopoda, Anthuridea) in Japan. On September 18, 1972, while engaged in an investigation the biota of the Muromi river, northern Kyushu, to study the influence of pollution on the faunal and floral change, Mr. Y. Mishima and other members happened to collect some anthurid isopods at the mouth of the river. These specimens were later sent to me for identification through the kindness of Professor T. Kikuchi of the Amakusa Marine Biological Laboratory. At closer examinations, they have proved to represent a new species of the genus *Cyathura*. The specimens, preserved in 70% alcohol, were dissected and examined in glycerol. All figures were drawn by using camera lucida.

Before going further, I would like to express my sincere gratitude to Dr. S. Nishimura of the Seto Marine Biological Laboratory for reading the manuscript, to Professor T. Kikuchi of the Amakusa Marine Biological Laboratory for his kindness of sending these specimens, and to Mr. Y. Mishima and other members of the Muromi river Research Group for their willingness in collecting the specimens.

Cyathura muromiensis, n. sp.
(Japanese name : Muromi-suna-uminanafushi)
(Text-figures 1~2)

Description: Body rather large, not so slender (body length except both antennae about nine to ten times as large as the widest part of the body). Body color dull yellow or reddish brown in alcohol. Median rostral point not so sharp. Eyes small, number of

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ocelli not discerned. Uropodal endopodite extending beyond posterior margin of the telson.

First antenna (Fig. 1-2) short with three peduncular segments. Flagellum with three segments.

Second antenna (Fig. 1-3) somewhat longer than the first antenna and with five peduncular segments, second segment oblong and grooved.

Mandible (Fig. 1-4) with a three-segmented palp, first segment about half the length of the second and longest one, third segment somewhat shorter than the second and with eight to ten long setae at the tip. Cutting flange (Fig. 1-5) with twenty-one to twenty-five recurved teeth. Molar process small and with a shallow cut at the tip. Incisor process brown in alcohol and with three rather stout teeth.

First maxilla (Fig. 1-6, 7) rather slender, with one bigger and six to seven smaller teeth.

Maxilliped (Fig. 1-8) consists of three wide free segments, first one oblong, second one rectangular, third one small with two long setae at the tip.

Peraeopod I (Fig. 1-9) subchelate. Coxa small. Basis triangular. Ischium and merus

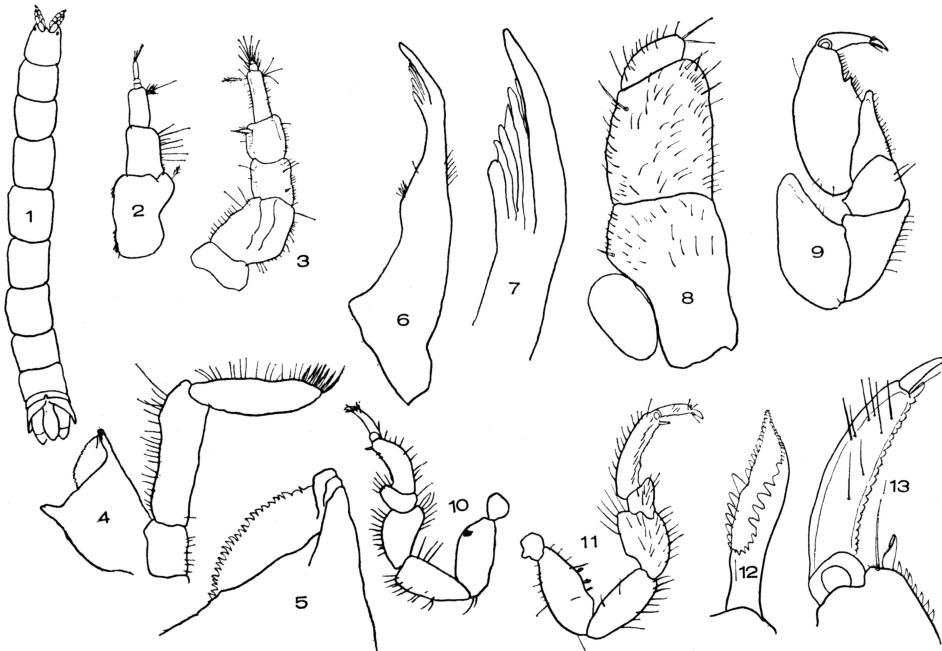


Fig. 1. *Cyathura muromiensis*, n. sp. 1. Dorsal view of female. 2. First antenna of female. 3. Second antenna of the same. 4. Mandible of holotype. 5. Cutting flange of mandible of holotype. 6. First maxilla of holotype. 7. Apical part of the same. 8. Maxilliped of holotype. 9. First peraeopod of holotype. 10. Sixth peraeopod of the same. 11. Seventh peraeopod of allotype. 12. Serrated spine of the same. 13. Dactylus of the same.

retangular. Carpus triangular. Propus big and with a projection on inner side. Dactylus long and with a claw.

Peraeopods II-VII (Fig. 1-10, 11) are all normal walking legs. Basis rectangular and often with one to three plumose setae on outer side. Ischium also rectangular. Merus and carpus triangular. Propus long with about thirty small denticles on inner side and with a serrated spine at distal margin, which is cup-shaped (Fig. 1-12) with about fifty teeth. Dactylus with about twenty small denticles, claw acute and brown in alcohol.

Male second pleopod (Fig. 2-1, 2) is characteristic in shape, stylus long with hand-shaped projection bearing twelve rows of two teeth. Other pleopods of both sex are similar in shape.

Exopod of uropod spindle-shaped with a weakly sinuate posterolateral margin (Fig. 2-8). Endopod of uropod (Fig. 2-9) extends beyond telson and apex provided with several short plumose setae and many long simple setae.

Material examined: 1♂ (allotype, cephalon and first peraeon broken, so body length undetermined), 20♀ (1♀ holotype, 16.9 mm in body length and 19♀ paratypes, 8.8 mm~17.3 mm in body length). All the types were collected from an intertidal muddy bottom mingled with sand, about 300 m from the mouth of the Muromi river, Fukuoka City, northern Kyushu, Japan. Type series is deposited as follows: Holotype (OMNH-Ar-120), allotype (OMNH-Ar-121) and 7 paratypes (OMNH-Ar-122~128) at the Osaka Museum of Natural History. 12 paratypes (AMBL-Isopoda-1~12) at the museum of the Amakusa Marine Biological Laboratory.

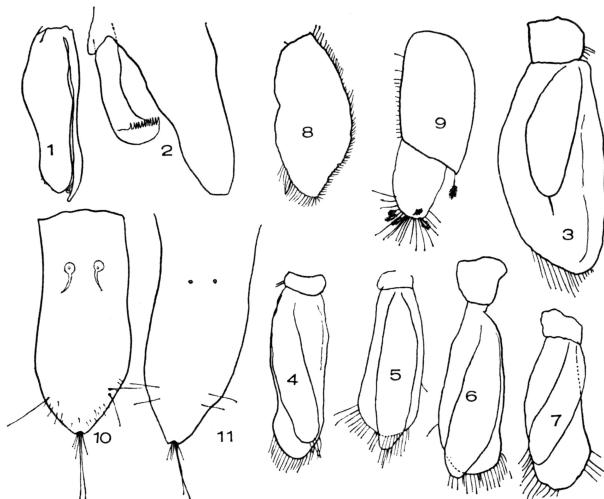


Fig. 2. *Cyathura muromiensis*, n. sp. 1. Second pleopod of allotype. 2. Stylus of the same. 3-7. 1-5 pleopods of holotype. 8. Exopod of uropod of holotype. 9. Endopod of uropod of holotype. 10. Telson of allotype. 11. Telson of holotype.

Remarks: The present new species seems to be closely allied to *Cyathura polita* (Stimpson) and *Cyathura carinata* (Krøyer) in external features. However, it is distinctly separated from the previously known species by the following points: (1) shape of male second pleopod, (2) presence of 21-25 serrations on flattened cutting flange of mandible, against 18-20 in *C. carinata* and 14-18 in *C. polita* (3) presence of 8-10 long setae on the third segment of mandibular palp, against 4-6 in *C. carinata* and 13-14 in *C. polita*.

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